

IN THE CLAIMS:

1-20. (Cancelled)

21. (Currently Amended) A medical apparatus, comprising:

a body cavity inserting portion which is inserted into a body and which has a thrust-generating spiral projected portion in contact with a body cavity; and

rotating device for rotating the thrust-generating spiral projected portion,

wherein

the rotating device includes:

a magnetic field generating device arranged outside the body for generating a rotating magnetic field; and

a magnet arranged inside the body cavity inserting portion and driven to rotate by the rotating magnetic field;

the thrust-generating spiral projected portion is set to have a shape with a projection height from not less than 0.3 mm to not more than 3 mm; and

the rotating magnetic field is set to rotate at a rotating speed of not more than 5 Hz.

22. (Canceled)

23. (Previously Presented) The medical apparatus according to Claim 21, wherein the thrust-generating spiral projected portion is formed in a multi-spiral screw shape having not less than 2 spirals.

24. (Previously Presented) The medical apparatus according to Claim 21, wherein the thrust-generating spiral projected portion has a cross sectional shape of at least one of a circle, a semicircle and a generally R shape.

25. (Previously Presented) The medical apparatus according to Claim 21, wherein the thrust-generating spiral projected portion is non-continuously formed.

26. (Canceled)

27. (Previously Presented) The medical apparatus according to Claim 21, wherein the body cavity inserting portion is a capsule medical apparatus.

28. (Previously Presented) The medical apparatus according to Claim 21, wherein:

the body cavity inserting portion includes a flexible stick portion; and
the thrust-generating spiral projected portion is supported rotatably with respect to the flexible stick portion.

29-30. (Canceled)

31. (Previously Presented) The medical apparatus according to Claim 21, wherein:

the thrust-generating spiral projected portion is formed in a multi-spiral screw shape having not more than 10 spirals.

32. (Previously Presented) The medical apparatus according to Claim 21, wherein:

a torque generated by the rotating device is set so as not to surpass a set value.

33. (Previously Presented) The medical apparatus according to Claim 32, wherein a set value for the torque generated by the rotating device is configured to be arbitrarily settable.

34. (Previously Presented) The medical apparatus according to Claim 32, wherein the set value is set to from not less than 0.06 cNm to not more than 1 cNm.

35. (Previously Presented) The medical apparatus according to Claim 34, wherein the body cavity inserting portion is a capsule medical apparatus.

36. (Currently Amended) The medical apparatus according to Claim 21, wherein:

at least one of a rising angle and a ~~failing~~ falling angle at an end portion of the thrust-generating spiral projected portion is smoothly formed at an angle not more than 45 degrees.

37. (Previously Presented) The medical apparatus according to Claim 21, wherein:

the thrust-generating spiral projected portion has an outer diameter of not more than 18 mm.

38. (Previously Presented) The medical apparatus according to Claim 21, wherein:

the thrust-generating spiral projected portion has at least one groove formed along the spiral of the thrust-generating spiral projected portion, the groove having a depth smaller than a height of the thrust-generating spiral projected portion.

39. (Previously Presented) The medical apparatus according to Claim 21, wherein:

the thrust-generating spiral projected portion is detachably attached to the body cavity inserting portion.

40. (Previously Presented) The medical apparatus according to Claim 39, wherein the thrust-generating spiral projected portion is formed of elastic rubber.

41. (Previously Presented) The medical apparatus according to Claim 21,
wherein:

the thrust-generating spiral projected portion has a generally trapezoidal cross sectional shape.

42. (Previously Presented) The medical apparatus according to Claim 21,
wherein:

the thrust-generating spiral projected portion has a spiral pitch which is set to not less than 10 mm.

43. (Previously Presented) The medical apparatus according to Claim 21,
wherein:

a center of gravity of the body cavity inserting portion substantially matches a longitudinal central axis of the body cavity inserting portion.

44-46. (Canceled)

47. (New) the medical apparatus according to claim 21, wherein the thrust-generating spiral projected portion is set to have a shape with a projection height from not less than 0.3 mm to not more than 2 mm.